

Revision Number 1

Revision date 05-Jun-2015

## 1. Identification of the Substance/Preparation and of the Company/Undertaking

**Product identifier**

**Product Code** C133838  
**Product name** AMBRETONE®

**Other means of identification**

**Synonyms** No information available

**Recommended use of the chemical and restrictions on use**

**Recommended use** Concentrated aromatic raw material intended for manufacturing use

**Details of the Supplier of the Safety Data Sheet**

**Supplier Address**

Takasago International Corporation (USA)  
 4 Volvo Drive  
 Rockleigh, NJ 07647 USA  
 Phone: 1-201-767-9001

**Emergency Telephone Number**

**Company Phone Number** Health & Environmental: 1-201-767-9001 9 a.m - 5 p.m. EST M-F

**Emergency Telephone Number**

CHEMTREC: 1-800-424-9300 24 hours Everyday  
 CHEMTREC (International): 01-703-527-3887 [U.S.A.] 24 hours Everyday

## 2. Hazard identification

**Classification**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Label Elements**

The product contains no substances which at their given concentration, are considered to be hazardous to health

**Hazards Not Otherwise Classified (HNOC)**

None known

**Other Information**

**Other Hazards** None known

## 3. Composition/information on Ingredients

**Formula** C16H28O

**Hazardous components**

	CAS No	Weight-%	Trade secret
5-Cyclohexadecen-1-one	37609-25-9	>=95	*

## 4. First aid measures

### FIRST AID MEASURES

<b>General advice</b>	When in doubt or if symptoms are observed, get medical advice.
<b>Inhalation</b>	Remove casualty to fresh air and keep warm and at rest. In case of respiratory tract irritation, consult a physician.
<b>Skin Contact</b>	Change contaminated, saturated clothing. After contact with skin, wash immediately with plenty of water and soap. In case of skin reactions, consult a physician.
<b>Eye contact</b>	In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.
<b>Ingestion</b>	If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting.
<b>Self-protection of the first aider</b>	Use personal protection recommended in Section 8.

### Most Important Symptoms and Effects, Both Acute and Delayed

**Symptoms** No known symptoms to date.

### Indication of Any Immediate Medical Attention and Special Treatment Needed

**Note to physicians** Treat symptomatically.

## 5. Fire-fighting measures

### Suitable extinguishing media

Foam. Carbon dioxide (CO<sub>2</sub>). Dry extinguishing powder.

**Large Fire** Alcohol resistant foam. Water spray.

**Unsuitable extinguishing media** Full water jet.

### Specific hazards

In case of fire may be liberated, Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Burning produces heavy smoke, Do not inhale explosion and combustion gases.

### Protective equipment and precautions for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Use water spray jet to protect personnel and to cool endangered containers. Move undamaged containers from immediate hazard area if it can be done safely. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section 8. Remove all sources of ignition. Provide adequate ventilation as well as local exhaustion at critical locations. See section 7 for more information.

**For emergency responders** Use personal protection recommended in Section 8.

### Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Ensure waste is collected and contained.

### Methods and material for containment and cleaning up

**Methods for cleaning up** Clean contaminated surface thoroughly.

## 7. Handling and Storage

### Precautions for Safe Handling

**Advice on safe handling** Avoid contact with skin, eyes or clothing. Wear protective gloves and eye/face protection. See Section 8 for information on appropriate personal protective equipment. Remove all sources of ignition. Provide adequate ventilation as well as local exhaust at critical locations. Handle and open container with care.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep container tightly closed in a cool, well-ventilated place. Store in a dry place. Protect from direct sunlight. Remove all sources of ignition. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

## 8. Exposure Controls/Personal Protection

### Control Parameters

**Exposure guidelines** This product does not contain any substances with occupational exposure limits established by OSHA under 29 CFR 1910 subpart Z, ACGIH or NIOSH.

### Appropriate Engineering Controls

**Engineering Controls** Provide adequate ventilation as well as local exhaust at critical locations. Do not subject to unnecessarily high temperatures during processing.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Eye glasses with side protection.

**Hand Protection** Wear chemically resistant gloves in combination with 'basic' employee training.

**Skin and body protection** Wear appropriate personal protective clothing to prevent skin contact.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and after work. Do not eat, drink or smoke when using this product.

**FEMA Statement** This product does not contain any substances at  $\geq 0.1\%$  listed as High Priority in Table 1 of the Flavor and Extract Manufacturers Association of the United States Respiratory Health and Safety in the Flavor Manufacturing Workplace (2012 edition)  
This product does not contain any substances at  $\geq 1.0\%$  listed as Low Priority in Table 1 of the Flavor and Extract Manufacturers Association of the United States Respiratory Health and Safety in the Flavor Manufacturing Workplace (2012 edition)

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

**Appearance** clear liquid  
**Color** colorless  
**Odor** musk, sweet, Floral, amber  
**Odor threshold** No data available

<u>Property</u>	<u>VALUES</u>	<u>Remarks • Method</u>
pH	No data available	
Melting point / freezing point	No data available	
Boiling point / boiling range	129-131 °C	@ 2 mmHg
Flash Point	167 °C / 333 °F	Closed cup
Evaporation rate	No data available	
Flammability (solid, gas)	No data available	
Flammability Limit in Air		
Upper Flammability Limit	No data available	
Lower Flammability Limit	No data available	
Vapor pressure	0.000125 mmHg@20°C (calculated)	
Vapor Density	No data available	
Relative Density	0.930-0.935 (D25°C/25°C)	
Relative Density	No data available	
Water Solubility	Insoluble in water	
Solubility in Other Solvents	No data available	
Partition coefficient	log Kow = 5.82 (calculated)	
Autoignition Temperature	No data available	
Decomposition temperature	No data available	
Kinematic viscosity	No data available	
Dynamic viscosity	No data available	
Explosive Properties	No data available	
Oxidizing Properties	No data available	

#### Other Information

Molecular weight	236.40
Refractive Index	1.485-1.495 (n <sub>20°C/D</sub> )

## 10. Stability and Reactivity

#### Reactivity

None under normal use conditions.

#### Chemical Stability

Stable under normal conditions. Stable under recommended storage conditions.

#### Possibility of Hazardous Reactions

None under normal processing.

#### Conditions to Avoid

Extremes of temperature and direct sunlight. Do not heat closed containers.

#### Incompatible Materials

Strong oxidizing agents. Strong acids. Strong bases.

#### Hazardous Decomposition Products

None under normal use.

## 11. Toxicological Information

#### Information on Likely Routes of Exposure

Product Information	No data available.
Inhalation	No data available.
Eye contact	No data available.
Skin Contact	No data available.

Ingestion No data available.

**Information on Toxicological Effects**

Symptoms No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin Corrosion/Irritation** In a guinea pig irritation test, a concentration of 30% in acetone was irritating, 10 % was mildly irritating and 5% was non-irritating. Undiluted material applied as a semi-occlusive patch for 4 hours to rabbit skin was considered non-irritating. Skin irritation was evaluated during the induction phase of a human repeated insult patch test and resulted in no effects when applied at 6%.

**Sensitization** A human repeated insult patch test conducted at 6% resulted in no effects. In a guinea pig maximization test, a concentration of 20% in ethanol produced sensitization responses while concentrations of 10%, 5%, 1% and 0.2% resulted in no effects.

**Mutagenic effects** Not mutagenic in AMES Test.

**Carcinogenicity** This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

**Reproductive Toxicity** No information available.

**STOT - Single Exposure** No information available.

**STOT - Repeated Exposure** No information available.

**Aspiration Hazard** No information available.

**Numerical Measures of Toxicity - Product Information**

Oral LD50 > 2000 mg/kg (rats)

**12. Ecological Information**

**Ecotoxicity** No information available.

**Persistence and Degradability** Inherently biodegradable, OECD Test No. 301C: Ready Biodegradability: Modified MITI Test (I) (TG 301 C).

**Bioaccumulation** No information available

**Other Adverse Effects** No information available

**13. Disposal Considerations**

**Waste Treatment Methods**

**Waste disposal method** Dispose of in accordance with local regulations.

**Contaminated Packaging** Do not reuse container.

**14. Transport Information**

**DOT Non-bulk Packaging**

<b>UN/ID no</b>	Not regulated
<b>Proper Shipping Name</b>	Not regulated
<b>Hazard class</b>	Not regulated
<b>Packing group</b>	Not regulated
<b>Marine Pollutant</b>	Not applicable

**Air transport**

<b>UN/ID no</b>	Not regulated
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Proper Shipping Name Not regulated  
Hazard class Not regulated  
Packing group Not regulated

**IMDG/IMO**

UN/ID no Not regulated  
Proper Shipping Name Not regulated  
Hazard class Not regulated  
Packing group Not regulated  
Marine Pollutant Not applicable

**15. Regulatory Information**

**Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazardous Categorization**

Acute health hazard	No
Chronic health hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

**16. Other Information**

Revision date 05-Jun-2015

**Disclaimer**

The information in this MSDS was obtained from current and reputable sources. However, the data is provided without any warranty, express or implied regarding its accuracy. Where the handling, storage and disposal of this material is beyond the immediate control of Takasago International Corporation, it shall be the user's responsibility to determine safe conditions for the use of this product. The user assumes all liability for loss, injury damage or expense resulting from the improper use of this product.

**End of Safety Data Sheet**